

THE IMPROVEMENT OF THE EDUCATIONAL PROGRAM OF COMMON  
SCHOOL DISTRICT NO. 80, THROUGH MORE EXTENSIVE  
UTILIZATION OF AUDIO-VISUAL AIDS

by

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B. S., Ft. Hays Kansas State College, 1954

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A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

School of Education

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

1964

Approved by:

  
Major Professor

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## TABLE OF CONTENTS

|  |    |
|--|----|
| INTRODUCTION . . . . .   | 1  |
| LOCATION AND HISTORY OF AREA UNDER STUDY . . . . .               | 3  |
| STATEMENT OF THE PROBLEM . . . . .                               | 7  |
| METHODS AND PROCEDURES . . . . .                                 | 7  |
| DEFINITION OF TERMS . . . . .                                    | 8  |
| REVIEW OF LITERATURE . . . . .                                   | 9  |
| THE STUDY . . . . .  | 20 |
| The Administrative Responsibility . . . . .                      | 20 |
| Inventory of Present Machines . . . . .                          | 21 |
| Audio-Visual Educational Background of the<br>Teachers . . . . . | 22 |
| CONCLUSIONS . . . . .  | 31 |
| RECOMMENDATIONS . . . . .  | 32 |
| BIBLIOGRAPHY . . . . .   | 34 |
| APPENDIX . . . . .   | 36 |

# LIST OF TABLES

| TABLE  | PAGE |
|--|------|
| I. The Minimum Basic Equipment for an Effective Audio-Visual Program for Each Attendance Center as Recommended by "California Commission on Audio-Visual Aids," <u>Audio-Visual Materials</u> and <u>Administering Audio-Visual Services</u> . . . . . | 14   |
| II. Inventory of Audio-Visual Machines . . . . .   | 22   |
| III. The Distribution and Responses of Questionnaires in Common School District No. 80 . . . .   | 23   |
| IV. Responses to the Question, "How Often Do You Use the Following Machines in the Classroom or in the Performance of Your Duties?" . . . .  | 24   |
| V. Responses to the Question, "Have You Been Enrolled in a Formal Course of Audio-Visual Education?" . . . . .   | 25   |
| VI. The Use of Audio-Visual Machines in Methods Courses in College as Experienced by the Staff of Common School District No. 80 . . . .  | 26   |
| VII. The Utilization of Audio-Visual Machines by Staff Personnel before They became Associated with Common School District No. 80 . . . . .  | 27   |
| VIII. In-Service Training for the Utilization of Audio-Visual Machines by the Staff of Common School District No. 80 . . . . .   | 28   |

|  |    |
|--|----|
| IX. The Ability of the Teachers of Common School |    |
| District No. 80 to Operate Various Audio-        |    |
| Visual Machines . . . . .                        | 30 |
| X. Personal Evaluation by the Staff of Their     |    |
| Ability to Utilize and Facilitate Audio-         |    |
| Visual Machines . . . . .                        | 31 |

#### ACKNOWLEDGMENT

The writer wishes to express his sincere appreciation to Dr. Harlan J. Trennepohl for his help and guidance in writing this report; also, the writer expresses his gratitude to Mr. Kenneth R. Root, Principal, Common School District No. 80, for approval to conduct this study within his school district.

## INTRODUCTION

The American school child has the opportunity of spending a sizable part of his out-of-school time enjoying the many modern communications available. Television, comic books, radio, movies, books, and phonographs are just some of the media competing for the student's leisure hours. To a considerable extent the teacher in the classroom has had to compete with these powerful media for the student's attention and interest. The classroom teacher was not presented, until recently, the modern media to adequately challenge this competition. It is a tribute to teachers that in the face of this competition they have achieved success. White, writing for The Nation's Schools, added further to this observation when he stated, "for until recently it was true that the American teacher was the only professional person still trying to work with yesterday's tools."<sup>1</sup>

This situation no longer exists in most schools. Films, film-strips, language recordings, slides, transparencies, radio broadcasts, and closed-circuit television are developing as fundamental tools in the classroom. The audio-visual programs of most schools are no longer just a weekly film showing in the auditorium for all the students.

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<sup>1</sup>Don White, "Tools of Learning," The Nation's Schools, 67:65, February, 1961.

They are being utilized by the teachers in good learning situations. Teachers are realizing that audio-visual devices offer them a variety of tools, each to be used in its best area, where it makes its contribution to the overall improvement in the school program.

The classroom teacher is aware of the importance of knowing the information that can be gained from audio-visual aids to arouse and sustain interest in the learner. Recordings provide interest through a change of pace in the classroom by reenacting an historical event, or by accurately reproducing bird calls, or by reproducing music that was prevalent during a specific era. Radio and television have the added factor of immediacy; the knowledge that what we hear and see is possibly taking place at that very moment.

Visual materials provide interest by their direct appeal to the visual sense without the need of the spoken word. Graphs, charts, maps, and other printed material are very effective and are easier to comprehend without lengthy oral instruction to interpret their meanings.

Projected materials have the added fascination of the lighted image on a screen. In addition to the fascination, learning achieved through the use of audio-visual aids becomes a more definite part of the student's memory. Wendt affirms this when he stated, "an outstanding value of audio-visual materials is that learning acquired through them is retained for a significantly longer period than the learning

acquired by purely verbal teaching."<sup>1</sup> Also, it is difficult, indeed, to look away from a picture projected on a screen in a darkened classroom.

While the use of interesting machines does not guarantee learning, every teacher knows that interest and motivation are basic to learning. The interest arousing characteristics of an audio-visual presentation may be used simply to relieve monotony of one kind of instruction, provide variety, or as Wittich and Schuller stated,

it is suggested that the teacher examine the role of audio-visual materials of instruction in terms of their ability to interest more completely the average child who is in school today, more effectively instruct him in the educational goals that have been chosen for him to attain, and more lastingly equip him with that socially desirable information which may be of use to him as he takes his place in the society of tomorrow.<sup>2</sup>

#### LOCATION AND HISTORY OF AREA UNDER STUDY

Chapman, Kansas, a rural community of approximately eleven hundred population, is located where Chapman creek joins the Smoky Hill River in eastern Dickinson County. The community was founded by settlers in the year 1958. This location was chosen because of its proximity to Fort Riley. Two reasons for this selection were: (1) the

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<sup>1</sup>Paul R. Wendt, "Audio-Visual Instruction," N E A, 53:10, April, 1964.

<sup>2</sup>W. A. Wittich and C. F. Schuller, Audio-Visual Materials, p. 11.



protection from Indian raids afforded by the troops, and (2) the close availability of staple foods as well as other supplies necessary on this new frontier.

The early economy of this area was primarily farming, although Fort Riley figured prominently in the finances of this area. This United States Fort was a cavalry center of the Army. The cavalry was in constant need of horses, therefore, many farmers developed large herds with expectations of selling them to the Army. This twofold economy, farming and horse ranching, stabilized this settlement.

Survival and growth were the most important factors to these early settlers; however, they realized the need of educating their children. The first public school was opened in 1878. This school started with seven students in one room, taught by one teacher.

Knowing the value of education beyond the elementary school, the local citizens of Chapman extended themselves in an effort to establish a high school. Their efforts were rewarded by the establishment of the Dickinson County Community High School in the year 1888. Both schools continue to serve the students of this area.

Normal growth and progress were experienced by both school districts until 1961. At this time, annexation almost doubled the enrollment of Chapman Elementary School. As a result of this consolidation of schools, the new

enlarged district became known as Common School District No. 80.

Common School District No. 80, with the general offices located at Chapman, Kansas, and offering education for grades kindergarten through eight, has attendance centers at both Chapman and Enterprise, Kansas. This educational program is the result of consolidation of seven school districts during the past four years. The merging of these seven educational units, each being a separate administrative unit, necessitated the realigning of staff and equipment. Many problems had to be resolved before the enlarged district could function as one unit. A better understanding of the overall situation is easier to perceive if a more comprehensive analysis of the consolidation is presented.

The annexation and consolidation were started in 1961 by the merging of Common School Districts No. 6, 8, 19, 23, and 24, located in western Geary County, with Common School District No. 80, located at Chapman, Kansas. The acceptance of these five districts by Common School District No. 80 presented the administration with the problem of an inadequate number of classrooms. To alleviate this situation, the schools of the districts enjoining Common School District No. 80 were maintained, as attendance units, for an additional year. This year permitted the renovation of present facilities at Chapman to accommodate the additional students. However, the accommodation of the students was just a small

part of the complete problem.

During the year of 1962, Common School District No. 16, located at Enterprise, Kansas, annexed to Common School District No. 80, located at Chapman, Kansas. Common School District No. 80 does not provide education for grades nine through twelve, therefore students from Common School District No. 16 in these grades attend Dickinson County Community High School. The remainder of their students are the responsibility of Common School District No. 80. A majority of the staff, as well as all equipment, accompanied the students into the new district.

The results of this consolidation necessitated the transportation of students as well as changes in attendance in the various buildings. Ultimately, the attendance centers of the districts in western Geary County were closed and the students transported to Chapman. Grades kindergarten through six attend school at Enterprise; the seventh and eighth grade students were transported to Chapman. A new physical plant was erected at Chapman to accommodate all seventh and eighth grade students of Common School District No. 80.

This mobilization of students increased the teaching staff of Common School District No. 80 from 14 teachers in 1961 to 30 teachers in 1963. Furthermore, the amount and kinds of equipment increased in relation to the teaching staff. The personnel and equipment are assigned to three

attendance units: an elementary unit at Enterprise, and an elementary unit and a junior high unit at Chapman.

#### STATEMENT OF THE PROBLEM

The problem was to increase the effectiveness of the educational program through increased utilization of audio-visual aids in Common School District No. 80, Dickinson County, Kansas by (1) reviewing the administrative responsibilities for an effective program, (2) investigating the recommendations of the minimum of basic machines vital to an effective and efficient program, and (3) surveying the purposes and criteria for an in-service training program.

#### METHODS AND PROCEDURES

A review of literature was made in the field of audio-visual education. From this review the following data and information were collected to permit research within District No. 80 that would enable extended utilization and facilitation of audio-visual educational machines.

Data and information collected were

- (1) the minimum equipment necessary for each attendance center,
- (2) the purposes and characteristics of an audio-visual center, and
- (3) the methods as well as the necessary personnel needed for an effective in-service training program.

Through the use of questionnaires the teachers of Common School District No. 80 have provided the following information: (1) their utilization of audio-visual machines during the 1963-64 school year, and (2) their background in audio-visual education.

#### DEFINITION OF TERMS

**Administrative Unit.** A geographic unit comprising all the area under a single system of school administration, generally constitutes a local taxing unit for school purposes.<sup>1</sup>

**Attendance Unit.** An administrative unit or subdivision of it consisting of the territory from which children legally may attend a given school building or school buildings.<sup>2</sup>

**Common School District.** Districts governed by either three or five-member school boards elected for three-year terms by the voters of their districts at annual meetings in June. There are three categories of common school districts: those that operate one-teacher schools; those that operate two or more teacher elementary schools; and those that operate both an elementary and high school.<sup>3</sup>

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<sup>1</sup>Carter V. Good, Dictionary of Education, p. 12.

<sup>2</sup>Ibid.

<sup>3</sup>Comprehensive Educational Survey of Kansas, The Elementary and Secondary Educational Study, Vol. II, p. 124.

Audio-Visual Aids. The term as applied to all materials that facilitate the understanding of the written word.

Audio-Visual Machines. The term is applied to all machines used in the classroom or in other teaching situations to facilitate the understanding of the written or spoken word.<sup>1</sup>

Utilization. Utilization is the system of judgment and procedures by means of which audio-visual materials are put to work to accomplish valid teaching objectives, with proper emphasis upon accepted principles of teaching and learning.<sup>2</sup>

Junior High School. The Junior High School consists of grades seven and eight in Common School District No. 80.

Elementary. Elementary schools consist of grades kindergarten through grade six in Common School District No. 80.

#### REVIEW OF LITERATURE

The elementary school child's world is a facet of his life by which he depends primarily on things he can see, taste, smell, feel, make, or use for experimentation. All sensory facilities require utmost utilization if the

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<sup>1</sup>Ellsworth C. Dent, The Audio-Visual Handbook, p. 1.

<sup>2</sup>Carlton Erickson, Administering Audio-Visual Services, p. 59.

educational needs of today's students are to be met. The liberal use of audio-visual machines will provide the teachers another means to the end that they are striving to meet.

At no time should textbooks and workbooks be discarded, but the use of audio-visual aids will enrich and enlarge the contents of the texts. The use of many aids enriches and enlivens the learning processes. It stirs the imagination. It insures a more complete concept, understanding, and enjoyment of the written word. Through a practical blending of films, film-strips, bulletin boards, recordings, field trips, and the many other aids, learning becomes deeper, the quality becomes greater, and a deeper insight into education becomes a reality.

The use of audio-visual aids began when man started conveying his thoughts to others. These thoughts were first discharged through the use of pictures. This method of communication was used until man devised symbols, when appropriately arranged, permitted the transmission of thought in a universal and acceptable mode; the advancement of civilization refined these processes of written communication. Furthermore, the use of audio-visual materials adds color, understanding, and imagination to written composition.

In education, audio-visual materials have been used since the first students brought interesting objects into the classroom for the purpose of sharing their experiences

with classmates. These objects for sharing are considered to be the beginning of the use of audio-visual aids; however, the city of St. Louis is credited with the establishment of the first permanent audio-visual department. This department, organized in the year 1905, provided the basic foundation of modern audio-visual programs.

The audio-visual movement was slow for some time after its conception. Definite acceleration became prevalent in the 1920's. The first education journal to be devoted exclusively to audio-visual education was The Educational Screen. It started publication in 1922. This publication, The Educational Screen, is now published under the name of The Educational Screen And Audio-Visual Guide. This beginning journal is now supplemented with many journals, pamphlets, textbooks, yearbooks of professional societies, and articles appearing in periodic publications.

Research in the field of audio-visual aids was greatly exploited from 1940 to 1947. Dale, Finn, and Hoban, writing for The Forty-Eighth Yearbook of The National Society for the Study of Education, reported the publication of twenty-seven status surveys during these years.<sup>1</sup> These surveys ranged from the number and type of projection machines available in the county, state, or the nation to

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<sup>1</sup>Edgar Dale, James Finn, and Charles Hoban, "Research on Audio-Visual Materials," Audio-Visual Materials of Instruction, Forty-Eighth Yearbook of the National Society for the Study of Education, Part I, p. 254.



the expenditures of these governmental agencies for audio-visual aids.

The following claims by Dale, Finn, and Hoban for properly used audio-visual materials in teaching situations, are supported by research evidence:

1. They supply a concrete basis for conceptual thinking and hence reduce meaningless word responses of students.
2. They have a high degree of interest for students.
3. They supply the necessary basis for developmental learning and hence make learning more permanent.
4. They offer a reality of experiences which stimulates self activity on the part of the student.
5. They develop a continuity of thought; this is especially true of motion pictures.
6. They contribute to growth of meaning and hence to vocabulary development.
7. They provide experiences not easily secured by other materials and contribute to the efficiency, depth, and variety of learning.<sup>1</sup>

James D. Finn, later, writing for the National Education Association continued to recognize these importances and values of audio-visual education. However, he questioned whether or not audio-visual machines are utilized enough when he wrote: "educational administrators, school boards, and other decision makers did not place a high

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<sup>1</sup>Ibid., p. 255.

enough value on these developments."<sup>1</sup> School administrators and school boards must recognize the value and importance of audio-visual aids, and proceed to solicit public support for the program.

In recent writings, many educators have established standards for minimum equipment for audio-visual departments. The establishment of minimum standards indicates pronounced support of audio-visual aids. Walter A. Wittich, in an article published in The Nation's Schools, outlined the minimum recommendations of the California Commission on Audio-Visual Aids. This commission's recommendations provide a basis for the amount of equipment necessary for functional cooperation of an audio-visual program. In Table I is a comparison of three recommendations: the minimum equipment as listed by Helen Hardt Seaton, in the book Audio-Visual Materials, written by Wittich and Schuller; the recommendations of Carlton Erickson, author of the book Administering Audio-Visual Services; and the recommendations of California Commission on Audio-Visual Aids.

Table I indicates considerable agreement on the minimum amount of basic equipment vital to an effective educational program.

Full utilization of audio-visual machines is not accomplished until facilities for their easy accessibility

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<sup>1</sup>James D. Finn, "The Franks Had the Right Idea," N E A Journal, 53:24, April, 1964.

TABLE I

THE MINIMUM BASIC EQUIPMENT FOR AN EFFECTIVE AUDIO-VISUAL  
PROGRAM FOR EACH ATTENDANCE CENTER AS RECOMMENDED  
BY "CALIFORNIA COMMISSION ON AUDIO-VISUAL AIDS,"  
AUDIO-VISUAL MATERIALS AND ADMINISTERING  
AUDIO-VISUAL SERVICES

| Name of machine      | : California Commission on Audio-Visual Aids <sup>a</sup> | : Audio-Visual Materials <sup>b</sup> | : Administering Audio-Visual Services <sup>c</sup> |
|----------------------|---|---------------------------------------|--|
| Sound Projector      | One for every 300 students or one per school              | One for every 200 students            | One for every 300 students or one per building     |
| Film-Strip Projector | One for every 200 students or one per school              | One for every 200 students            | One for every 200 students or one per building     |
| 2" x 2" Projector    | One for every 200 students or one per school              | One for every 400 students            | One for every 200 students or one per building     |
| Opaque Projector     | One for every school                                      | One for every school                  | One for every school                               |
| Radio                | No recommendation   | One for each classroom                | Two for each school                                |
| Record Player        | Two for each school                                       | One for each 200 students             | Two for each school                                |
| Tape Recorder        | One for every 300 students or one per school              | One for each school                   | One for every 300 students or one per school       |

<sup>a</sup>Walter A. Wittich, "Audio-Visual Facilities," The Nation's Schools, 62:80, November, 1958.

<sup>b</sup>Walter Wittich and Charles Schuller, Audio-Visual Materials, p. 515.

<sup>c</sup>Carlton Erickson, Administering Audio-Visual Services, pp. 341-42.

are achieved. Easy accessibility and utilization of audio-visual materials are interdependent; Reynold Swanson, writing for the American School Board Journal, stated "most frequently teachers do not use audio-visual materials because they are not available or not readily accessible."<sup>1</sup> The establishment of a Materials Center will alleviate much of this lack of availability as well as modify or arrest many frustrations experienced by teachers attempting the use of audio-visual machines.

Reynold Swanson defined and presented the functions of a materials center as:

a well planned area housing materials and equipment for instructional use under the supervision of a competent person well versed in general education and available materials. It should provide services, facilities, materials, and equipment to improve the instructional program of the pupils, teachers, and adults of the community.

The center serves as a depository for special materials which will aid the teacher to present better his subject area and to take care of the wide range of individual differences that exist in classes. The educational aids adaptable to further the professional growth of the teaching staff are also considered a part of this type of organization.

This is a place, also, where new or experimental types of instructional materials may be developed, produced, and evaluated for possible future use or adoption.<sup>2</sup>

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<sup>1</sup>Reynold Swanson, "Improving Instruction Through Materials Centers," American School Board Journal, 139:47, October, 1959.

<sup>2</sup>Ibid.

A more important aspect of the materials center is the need of qualified and dynamic leadership. The program should be directed by a person, committee, or rotated among present personnel if the size of the district does not permit employment of a director. Charles Schuller<sup>1</sup> and Anna Hyer,<sup>2</sup> writing for The Nation's Schools, recommended a quarter-time director for a school with twelve teachers or less, a half-time director for schools with less than thirty teachers, and a full-time director if the school system employs fifty teachers or more. The director would assume full responsibility of the instructional materials center.

One of the more important aspects of the director's responsibility is the perpetual training of teachers. This perpetual training is emphasized by Hass, when he presents three reasons for this training.

1. Education is needed to be kept abreast of the new knowledge, associated with audio-visual aids, and release creative abilities.
2. Provide the much needed help for the new teachers within the school system.
3. Utilize these training sessions to eliminate and alleviate the deficiencies in the background preparations of teachers.<sup>3</sup>

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<sup>1</sup>Charles Schuller, "Improve Your Instructional Program," The Nation's Schools, 63:71, February, 1959.

<sup>2</sup>Anna Hyer, "Administration," The Nation's Schools, 67:91, February, 1961.

<sup>3</sup>C. Glen Hass, "In-Service Education Today," In-Service Education, Fifty-Sixth Yearbook of the National Society for the Study of Education, Part I, pp. 13-14.

In implementing training for the use of audio-visual aids, the role of the local board, through the director, is vital to this in-service training. The schools' importance is accentuated by Weber,

Boards of education, school administrators and teachers have assumed to a considerable degree that the chief source of growth of teachers lies in the practice of attending summer sessions, attending extension classes, and otherwise engaging in study outside the sphere of the school itself. Activities are of great significance and importance, yet one of the most fruitful agencies for education teachers in-service could and should be the school system. Real learning should suggest solutions to real problems which the teacher has the occasion and opportunity to test in application.<sup>1</sup>

Seeking solutions to real problems becomes a greater reality through an efficiently and effectively supervised workshop.

De Bernardis wrote the following:

The audio-visual workshop offers a great deal of promise as a technique for in-service education of teachers. It gives teachers an opportunity to work on individual problems; it allows for flexible schedules; it helps to develop a co-operative work spirit; it provides for more individual guidance; and it helps develop a better attitude toward audio-visual materials. The essential requirements are:

1. A group of teachers who have specific problems on which they want help.
2. A capable leader to direct the workshop.
3. Enough resources (materials, equipment, consultants) to meet the individual and group needs.

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<sup>1</sup>C. A. Weber, Personnel Problems of School Administrators, pp. 72-73.

#### 4. An adequate work space.<sup>1</sup>

The effectiveness of the in-service program becomes the responsibility of the director. Through his leadership and guidance, the training sessions become a process of democratic skill-building sessions. The term 'democratic' implies coordinating and utilizing trained personnel to release their potentials which will benefit all participants.

The process of discovering competent personnel could be by several methods. Erickson suggested, "teacher-survey questionnaires, audio-visual center records of deliveries to schools, principals' observations, and accumulated data,"<sup>2</sup> as some procedures used to identify possible training teachers.

The selected so-called training teachers, including the director and building principal, would assume by the very nature of their positions, the key force in the in-service program. Erickson provided six major abilities which can function as a guide in developing a successful session; they are:

1. How to formulate valid teaching purposes.
2. How to find and choose audio-visual materials.

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<sup>1</sup>Amo De Bernardis, "In-Service Teacher Education," Audio-Visual Materials of Instruction, Forty-Eighth Yearbook of the National Society for the Study of Education, Part I, p. 117.

<sup>2</sup>Carlton Erickson, Administering Audio-Visual Services, p. 112.

3. How to build readiness for materials.
4. How to control equipment and physical facilities.
5. How to guide participation of learners during or after the use of materials.
6. How to evaluate the materials and accompanying techniques.<sup>1</sup>

The total competence of an effective in-service training program in audio-visual education is most difficult to evaluate; however, Erickson listed the following principles which should result from developing competence in teachers.

1. Teachers should base their selection of high-quality audio-visual materials upon valid teaching purposes and upon the unique characteristics of a specific group of learners.
2. The use of audio-visual instructional materials should be preceded by the development of adequate learner readiness for effective participation.
3. Details relating to physical facilities and conditions for using audio-visual materials should be handled or arranged for by the teacher in a manner that safeguards materials and equipment and provides for economy of time and optimum learner attention.
4. Teachers should guide the learner in the important processes of reacting to, and taking appropriate action as a result of audio-visual experience situations.
5. Teachers should subject both the audio-visual material and the accompanying techniques to continual evaluation.<sup>2</sup>

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<sup>1</sup>Ibid., pp. 61-63.

<sup>2</sup>Ibid.



## THE STUDY

Three areas were examined in Common School District No. 80: the administrative responsibilities, the inventory of the available audio-visual machines, and the academic background of the teachers in the utilization of audio-visual aids. The information from the teachers was obtained through a questionnaire.

### The Administrative Responsibility

Prior to 1963, the audio-visual program was experiencing normal progress and development. The acquisition of materials and machines was kept in relationship to the students and teaching personnel. The utilization of the audio-visual aids and machines by the teaching staff was considered acceptable. Intermittent in-service training programs were conducted throughout the school year.

It was not necessary to conduct many in-service programs because of the few teaching personnel. In most cases, the training in audio-visual education was on a personal basis. The school principal, because of his position, assumed the responsibility and was solely responsible for this training. In addition to the training sessions, the movement, as well as the maintenance of all audio-visual equipment, was a definite part of his assumed responsibilities. The overall program to this time was considered to

have strength and depth; its utilization was very influential on the total educational program.

The consolidation of the school districts in 1963 was very damaging to the audio-visual program. The following factors characterized the deterioration.

1. Increased responsibilities of the administration prevented the following:
  - a. close supervision of the use of audio-visual aids,
  - b. helping teachers plan the use of aids in presenting units of study,
  - c. follow-up on the planning,
  - d. sufficient time for a complete and thorough evaluation of the overall program, and
  - e. adequate time for an effective and continuous in-service training program.
2. The disbursement of the machines in the three attendance units prevented the wanted machine from being accessible to the teachers.
3. Discouragement by the teachers because of insufficient numbers of machines.
4. Teachers unable to locate machines which results from not having permanent storage or an audio-visual center.

#### Inventory of Present Machines

An inventory of the available audio-visual machines appears in Table II. This inventory was conducted in each attendance center.

TABLE II  
INVENTORY OF AUDIO-VISUAL MACHINES

| Name of machine                      | : Chapman<br>: Elementary | : Enterprise<br>: Elementary | : Chapman<br>: Junior High |
|--------------------------------------|---------------------------|------------------------------|----------------------------|
| 16 mm<br>projector                   | 1                         | 1                            | 1 <sup>a</sup>             |
| Film-strip<br>and slide<br>projector | 3                         | 1                            | 1                          |
| Opaque<br>projector                  | 1                         |                              |                            |
| Micro-<br>projector                  |                           |                              | 2                          |
| Tape<br>recorder                     | 1                         | 1                            | 1                          |
| Record<br>player                     | 4                         | 2                            |                            |
| Radio                                | 1 <sup>b</sup>            |                              | 1 <sup>b</sup>             |
| Camera                               |                           |                              | 1                          |

<sup>a</sup>This projector is equipped with a rear-view screen.

<sup>b</sup>This radio is part of the console of the inter-communications system which operates throughout the building.

The inventory was confined, through necessity, to the audio-visual machines. An inventory of all audio-visual aids would be too exhaustive for the purposes of this report.

#### Audio-Visual Educational Background of the Teachers

The third area investigated in Common School District No. 80, was the academic background in the field of

audio-visual aids of the present staff.

The information was obtained from the staff through the use of questionnaires. The questionnaire was presented to the teachers, with an accompanying letter which imparted the purposes and scope of the study, comprising the staff for the school year 1963-64. Table III shows the distribution and the number of responses to the questionnaire.

TABLE III  
THE DISTRIBUTION AND RESPONSES OF QUESTIONNAIRES  
IN COMMON SCHOOL DISTRICT NO. 80

| Name of school        | : Distributed : | : Returned : | Per cent returned |
|-----------------------|-----------------|--------------|-------------------|
| Chapman Elementary    | 14              | 14           | 100               |
| Enterprise Elementary | 8               | 8            | 100               |
| Chapman Junior High   | 8               | 7            | 87.5              |

Responses from the staff on the questionnaire totaled 96 per cent. This percentage will provide adequate information for the questionnaire's intended purpose.

The first question of the questionnaire "How often do you use the following machines in the classroom or in the performance of your duties during the school year?" was structured for the following possible answers: 1 to 5 times,

6 to 15 times, 16 or more times, or never. Table IV presents the responses to the question.

TABLE IV  
RESPONSES TO THE QUESTION, "HOW OFTEN DO YOU USE THE  
FOLLOWING MACHINES IN THE CLASSROOM OR IN THE  
PERFORMANCE OF YOUR DUTIES?"

| Name of machine       | : 1 to 5<br>: times | : 6 to 15<br>: times | : 15 times :<br>: or more | : Never |
|-----------------------|---------------------|----------------------|---------------------------|---------|
| 16 mm movie projector | 7                   | 11                   | 6                         | 4       |
| Film-strip projector  | 13                  | 5                    | 5                         | 6       |
| Slide projector       | 11                  | 2                    | 1                         | 13      |
| Opaque projector      | 11                  | 8                    | 1                         | 6       |
| Micro-projector       | 5                   | 0                    | 1                         | 21      |
| Tape recorder         | 9                   | 5                    | 2                         | 12      |
| Record player         | 5                   | 5                    | 9                         | 9       |
| Radio                 | 5                   | 0                    | 0                         | 21      |
| 35 mm camera          | 7                   | 0                    | 0                         | 19      |
| Other                 |                     |                      |                           |         |

Table IV indicates many staff members are not utilizing audio-visual machines to their fullest extent. Many factors contribute to this non-utilization.

Endeavoring to find causes for non-utilization of audio-visual machines, the questionnaire requested

information concerning the formal training of the staff in Audio-Visual Education. Question 3 asked "Have you been enrolled in a formal course of Audio-Visual Education?" Possible responses were: in the past 3 years, in the past 6 years, in the past 10 years, I have never enrolled in an Audio-Visual course. Table V presents the responses from the three attendance centers.

TABLE V

RESPONSES TO THE QUESTION, "HAVE YOU BEEN ENROLLED IN A FORMAL COURSE OF AUDIO-VISUAL EDUCATION?"

| Name of school           | : Past<br>3 years | : Past<br>6 years | : Past<br>10 years | : Never |
|--------------------------|-------------------|-------------------|--------------------|---------|
| Chapman<br>Elementary    | 4                 | 1                 | 2                  | 7       |
| Enterprise<br>Elementary | 2                 | 3                 |                    | 3       |
| Chapman<br>Junior High   |                   |                   | 1                  | 6       |

Table V indicates that 21 per cent received formal Audio-Visual Education within the past 3 years, 14 per cent within the past 6 years, 10 per cent within the past 10 years, and 55 per cent have never received formal Audio-Visual training.

Experiences in practical application of audio-visual aids have proved to be most beneficial for the observant student. Throughout college, many lecture and laboratory courses are supplemented by audio-visual aids; methods

courses are given strength and variety by imaginative instructors. Table VI illustrates the exposures of the staff to audio-visual aids in college courses. The questionnaire asked for replies to this question, "As a regular part of your methods courses in college, audio-visual machines were never used, used sparingly, used moderately, and used extensively."

TABLE VI

THE USE OF AUDIO-VISUAL MACHINES IN METHODS COURSES IN  
COLLEGE AS EXPERIENCED BY THE STAFF OF COMMON  
SCHOOL DISTRICT NO. 80

| Name of school:          | : Never<br>used | : Used<br>:sparingly | : Used<br>:moderately | : Used<br>:extensively |
|--------------------------|-----------------|----------------------|-----------------------|------------------------|
| Chapman<br>Elementary    | 2               | 7                    | 2                     | 3                      |
| Enterprise<br>Elementary | 2               | 3                    | 2                     | 1                      |
| Chapman<br>Junior High   | 1               | 3                    | 3                     |                        |

Table VI indicates that 63 per cent of the respondents never experienced, or experienced sparingly, the utilization of audio-visual machines while enrolled in methods courses. However, 37 per cent experienced moderate or extensive utilization of audio-visual machines in methods courses.

To fully determine the potential of staff members, their previous experiences and knowledge in the utilization

of audio-visual machines are necessary. Knowledge obtained by staff members while employed in other school districts was determined by the questionnaire. Table VII presents the responses to the statement, "Before becoming a teacher for Common School District No. 80, I never used, used sparingly, used moderately, or used extensively audio-visual machines."

TABLE VII

THE UTILIZATION OF AUDIO-VISUAL MACHINES BY STAFF  
PERSONNEL BEFORE THEY BECAME ASSOCIATED WITH  
COMMON SCHOOL DISTRICT NO. 80

| Name of school:          | : Never<br>used | : Used<br>:sparingly | : Used<br>:moderately | : Used<br>:extensively |
|--------------------------|-----------------|----------------------|-----------------------|------------------------|
| Chapman<br>Elementary    | 3               | 7                    | 3                     | 1                      |
| Enterprise<br>Elementary | 1               | 3                    | 3                     | 1                      |
| Chapman<br>Junior High   | 2               | 4                    | 1                     |                        |

Table VII indicates that 68 per cent of the staff never used or used sparingly audio-visual machines in their career before becoming a staff member of Common School District No. 80.

Further inquiry by the questionnaire attempted to attain information about the in-service training received by the staff. Responses were solicited on the following: "During the past four years have you



- (a) received adequate in-service training in the use of audio-visual machines, enabling a high degree of performance?
- (b) received some training in the use of audio-visual machines?
- (c) received no training in the use of audio-visual machines?
- (d) been presented an opportunity to attend in-service training programs in the use of audio-visual machines?"

The responses to the preceding questions are presented in Table VIII.

TABLE VIII  
IN-SERVICE TRAINING FOR THE UTILIZATION OF AUDIO-VISUAL  
MACHINES BY THE STAFF OF COMMON SCHOOL DISTRICT  
NO. 80

| Name of school           | : Adequate :<br>: training : | : Some :<br>: training : | : No :<br>: training : | : Opportunity<br>: for<br>: training |
|--------------------------|------------------------------|--------------------------|------------------------|--------------------------------------|
| Chapman<br>Elementary    | 2                            | 11                       | 1                      |                                      |
| Enterprise<br>Elementary | 1                            | 7                        |                        |                                      |
| Chapman<br>Junior High   | 1                            | 4                        | 2                      |                                      |

An evaluation of Table VIII indicates that the majority of the staff personnel received some training in the use of audio-visual machines. Only 14 per cent indicated adequate training in audio-visual education.

Knowledge to operate the various audio-visual machines is of paramount value. The ability of the staff to operate

the various machines was obtained by the seventh part of the questionnaire. Teachers were presented the opportunity to rate their ability on the various machines as (1) unable to operate, (2) operate with difficulty, and (3) good knowledge of machine. The possible choices were defined as follows:

unable to operate (do not understand the principles of operation).

operate with difficulty (an understanding of the principles of operation but cannot locate minor trouble or irregularities).

good knowledge of machine (an understanding of the principles of operation as well as locating and alleviating minor trouble or irregularities).

Table IX presents the responses from the teachers on their ability to operate audio-visual machines.

Table IX is a tabulation of the three attendance centers and indicates a majority of the staff of Common School District No. 80 possesses sufficient knowledge to adequately operate the various machines; however, several members of the staff failed to indicate their ability to operate specific machines.

Individual confidence to utilize audio-visual machines is very vital to the educational program. The confidence of the staff was solicited by question 2 in the questionnaire. The following question was asked: "Would your knowledge of audio-visual machines qualify you as a (1) learner, (2) a teacher demonstrator, or (3) a member of a steering committee to improve and facilitate greater use of these machines?"

TABLE IX

THE ABILITY OF THE TEACHERS OF COMMON SCHOOL DISTRICT  
NO. 80 TO OPERATE VARIOUS AUDIO-VISUAL MACHINES

| Name of machine:        | : Unable to<br>operate | : Operate with<br>: difficulty | : Good knowledge<br>: of machine |
|-------------------------|------------------------|--------------------------------|----------------------------------|
| 16 mm<br>projector      | 1                      | 14                             | 14                               |
| Film-strip<br>projector | 1                      | 11                             | 16                               |
| Slide<br>projector      | 3                      | 8                              | 15                               |
| Opaque<br>projector     | 3                      | 8                              | 15                               |
| Micro-<br>projector     | 13                     | 6                              | 6                                |
| Tape<br>recorder        | 4                      | 12                             | 11                               |
| Record<br>player        |                        | 5                              | 24                               |
| Radio                   |                        | 3                              | 22                               |
| 35 mm<br>camera         | 9                      | 11                             | 7                                |

The responses to the previous question are listed in Table X.

Table X indicates that 35 per cent of the present staff express confidence in their ability to benefit and enrich audio-visual machine training sessions.

TABLE X

PERSONAL EVALUATION BY THE STAFF OF THEIR ABILITY TO  
UTILIZE AND FACILITATE AUDIO-VISUAL MACHINES

| Name of school           | :<br>Learner | :<br>Demonstrator | : Steering<br>committee |
|--------------------------|--------------|-------------------|-------------------------|
| Chapman<br>Elementary    | 9            | 4                 |                         |
| Enterprise<br>Elementary | 5            | 2                 | 1                       |
| Chapman<br>Junior High   | 4            | 3                 |                         |

## CONCLUSIONS

By comparing what authorities believe to be a good audio-visual program for a school, the writer found the following to be true in Common School District No. 80.

The administrator of the school district does not have sufficient time to insure an effective audio-visual program.

The absence of leadership was prevalent in audio-visual education.

A central location was needed for the storage and maintenance of equipment.

The distribution of equipment did not follow a well-conceived plan.

There was a definite need for a greater variety as well as a greater number of audio-visual machines.

Regular in-service training sessions were not scheduled.

Teachers were not utilizing audio-visual machines to their fullest extent.

Some of the teachers experience a lack of confidence in the use of the machines.

Lack of knowledge of the advantages of audio-visual machines was prevalent within the staff.

The majority of the teachers received little or no formal training in the use of audio-visual machines.

Staff members were presented few opportunities to observe or utilize the effectiveness of audio-visual machines while in college or before becoming staff members of Common School District No. 80.

Recent in-service training by the present staff has been spasmodic and spontaneous.

#### RECOMMENDATIONS

It is recommended that Common School District No. 80 initiate the following procedures which will help to insure a continued and progressive educational program.

The employment of a half-time audio-visual director who will be responsible for the administration of the program.

Through the director, purchase the quantity and variety of machines necessary for an efficient and effective educational program.

Inaugurate an in-service training program to acquaint, educate, and instill within the staff the benefits and advantages of the utilization of audio-visual machines.

Establish and maintain, as a functional part of the educational program, an audio-visual center for the storage, maintenance, and use of audio-visual machines.

Encourage the staff members to continue their formal education in the use of audio-visual aids.

The proposed plan should provide a method for assuring an efficient and effective education for all youth in Common School District No. 80.

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## APPENDIX

March 18, 1964

Teachers  
Common School District No. 80  
Chapman, Kansas

Dear Teachers,

During the next few months I plan to do a study, "The Improvement of the Educational Program of Common School District No. 80, through more Extensive Utilization of Audio-Visual Aids." This study is being done for two purposes, (1) to provide the necessary information for facilitating and accelerating our audio-visual program, and (2) this information will be the basis of my Master's Report, which is under the supervision of Dr. Trennepohl, School of Education, Kansas State University, Manhattan, Kansas. As a teacher in Common School District No. 80, you are very important to this study.

Enclosed is a questionnaire desiring information from you on (1) your use of audio-visual machines and (2) your educational background in the use of these machines. This information from you will be very beneficial in strengthening our audio-visual program. I would be most appreciative if you would complete the enclosed questionnaire.

I am sending this questionnaire to you several weeks in advance of the schedule I adopted for this study, but it is my intention for you to complete and return this questionnaire to me before spring activities begin demanding a great amount of your time. Would you please return the completed questionnaire to your building principal.

I would appreciate your giving the questionnaire considered judgment and returning it to the principal as soon as possible.

Sincerely,

Virgil Wendler

## Teachers' Questionnaire

THE IMPROVEMENT OF THE EDUCATIONAL PROGRAM OF COMMON SCHOOL DISTRICT NO. 80, THROUGH MORE EXTENSIVE UTILIZATION OF AUDIO-VISUAL AIDS.

Directions: Please answer each item as it pertains to you. Place a check mark in the blank before the appropriate answer. Only one check for each question is desired.

1. How often do you use the following machines in the classroom or in the performance of your duties during the school year?

| Name of Machine       | : 1 to 5<br>: times | : 6 to 15<br>: times | : 16 or more:<br>: times | : Never |
|-----------------------|---------------------|----------------------|--------------------------|---------|
| 16 mm movie projector | :                   | :                    | :                        | :       |
| film-strip projector  | :                   | :                    | :                        | :       |
| slide projector       | :                   | :                    | :                        | :       |
| opaque projector      | :                   | :                    | :                        | :       |
| micro-projector       | :                   | :                    | :                        | :       |
| tape recorder         | :                   | :                    | :                        | :       |
| record player         | :                   | :                    | :                        | :       |
| radio                 | :                   | :                    | :                        | :       |
| 35 mm camera          | :                   | :                    | :                        | :       |
| other (please name)   | :                   | :                    | :                        | :       |
|                       | :                   | :                    | :                        | :       |
|                       | :                   | :                    | :                        | :       |

2. Would your knowledge of audio-visual machines qualify you as:

\_\_\_\_\_ a. a learner.

\_\_\_\_\_ b. a teacher demonstrator.

\_\_\_\_\_ c. a member of a steering committee to improve and facilitate greater use of these machines.

3. Have you been enrolled in a formal course of Audio-Visual education

- ☐ a. in the past 3 years.
- ☐ b. in the past 6 years.
- ☐ c. in the past 10 years.
- ☐ d. I have never enrolled in an Audio-Visual course.

4. As a regular part of your methods courses in college, audio-visual machines were

- ☐ a. never used.
- ☐ b. used sparingly.
- ☐ c. used moderately.
- ☐ d. used extensively.

5. Before becoming a teacher for Common School District No. 80

- ☐ a. I never used audio-visual machines.
- ☐ b. I used audio-visual machines sparingly.
- ☐ c. I used audio-visual machines moderately.
- ☐ d. I used audio-visual machines extensively.

6. During the past four years have you

- ☐ a. received adequate in-service training in the use of audio-visual machines, enabling a high degree of performance.
- ☐ b. received some training in the use of audio-visual machines.
- ☐ c. received no training in the use of audio-visual machines.
- ☐ d. been presented an opportunity to attend in-service training programs in the use of audio-visual machines.

7. Please rate your competency of the following machines by using the guide below. Interpret the terms used below as:

unable to operate (do not understand the principles of operation).

operate with difficulty (an understanding of the principles of operation but cannot locate minor trouble or irregularities).

good knowledge of machine (an understanding of the principles of operation as well as locating and alleviating minor trouble and irregularities).

| Name of Machine      | :unable to<br>: operate | :operate with<br>: difficulty | :good knowledge<br>: of machine |
|----------------------|-------------------------|-------------------------------|---------------------------------|
| 16 mm projector      | :                       | :                             | :                               |
| film-strip projector | :                       | :                             | :                               |
| slide projector      | :                       | :                             | :                               |
| opaque projector     | :                       | :                             | :                               |
| micro-projector      | :                       | :                             | :                               |
| tape recorder        | :                       | :                             | :                               |
| record player        | :                       | :                             | :                               |
| radio                | :                       | :                             | :                               |
| 35 mm camera         | :                       | :                             | :                               |
| other (please name)  | :                       | :                             | :                               |
|                      | :                       | :                             | :                               |
|                      | :                       | :                             | :                               |

THE IMPROVEMENT OF THE EDUCATIONAL PROGRAM OF COMMON  
SCHOOL DISTRICT NO. 80, THROUGH MORE EXTENSIVE  
UTILIZATION OF AUDIO-VISUAL AIDS

by

VIRGIL WENDLER

B. S., Ft. Hays Kansas State College, 1954

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AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

School of Education

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

1964

The purpose of the study was to augment the educational program through increased utilization of audio-visual aids in Common School District No. 80, Dickinson County, Kansas by (1) reviewing the administrative responsibilities for an effective program, (2) investigating the recommendation of the minimum of basic machines vital to an effective and efficient program, and (3) surveying the purposes and criteria for an in-service training program.

A review of literature was made in the field of audio-visual education with emphasis in the following areas: (1) the amount of equipment necessary for each attendance center, (2) the purposes and characteristics of an audio-visual center, and (3) the methods as well as the personnel necessary for an in-service training program. A questionnaire was utilized to obtain the following information from the 1963-64 school year staff of Common School District No. 80: (1) their utilization of audio-visual machines during the 1963-64 school year, and (2) their background in audio-visual education. The procedure was to study the data gathered and propose plans to improve the educational opportunities for the students of this district.

The review indicated that (1) the administrator does not have sufficient time to insure an effective audio-visual program, (2) an audio-visual center was needed for the storage and distribution of audio-visual machines, (3) a definite shortage of equipment existed, (4) in-service

education in the use of audio-visual machines was spasmodic and spontaneous, and (5) the majority of the staff received little or no formal training in the utilization of audio-visual machines.

The proposed plan was (1) the employment of a half-time audio-visual director, (2) the acquisition of the necessary machines to meet the minimum requirements, (3) the inauguration of an in-service training program, (4) the establishment and maintenance of an audio-visual center, and (5) to encourage the staff members to continue their formal education in the utilization of audio-visual aids. The proposed plan should provide a method for assuring an efficient and effective education for all youth in Common School District No. 80.